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1874). I mention the present case merely by way of illustration, and not for the purpose of making any special strictures upon my friend Dr. Brewer, who is by no means in this respect an exceptional transgressor. If it is urged that the people would not understand such expressions as the "Alleghanian Fauna," and the like, it may be said that the time has come when they should be familiar with them. Most intelligent people know that isothermal lines vary in direction with the elevation and contour of the land over which they pass, sweeping, in our own country, far to the southward in leaving the lowlands of the Atlantic coast; that they pass southward of the Appalachian Highlands, and then bend abruptly northward again along their western base. It is time they knew, also, that the different zones of animal life follow the flexures of the isotherms, and that there are natural faunal belts, sufficiently distinct to be capable of recognition, whose boundaries coincide very nearly with certain of these isotherms. Furthermore, that throughout eastern North America, at least, these faunal belts are already well known to specialists of the subject, and that there already exist definite expressions for such cases as the one that has furnished the text for the present note. I will add, also, that so much is already known of the laws of the geographical distribution of animal life, that one could have safely assumed, from our present knowledge of the general range of the chestnut-sided warbler, that from its being a rather common summer resident in southern New England, it would also be found to breed in the mountainous districts as far south even as northern Georgia.—J. A. Allen.

GEOLOGY AND PALEONTOLOGY.

New Order of Eocene Mammals.—At the last meeting of the Connecticut Academy, Feb. 17th, Professor O. C. Marsh made a communication on a new order of Eocene Mammals, for which he proposed the name *Tillodontia*. These animals are among the most remarkable yet discovered in American strata, and seem to combine characters of several distinct groups, viz.: Carnivores, Ungulates and Rodents. In *Tillotherium* Marsh, the type of the order, the skull has the same general form as in the bears, but in its structure resembles that of Ungulates. The molar teeth are of the ungulate type, the canines are small, and in each jaw there is a pair of large scalpriform incisors faced with enamel, and growing from persistent pulps, as in Rodents. The adult dentition is as follows : — Incisors $\frac{2}{2}$; canines $\frac{1}{1}$; premolars $\frac{3}{2}$; molars $\frac{3}{3}$. The articulation of the lower jaw with the skull corresponds to that in Ungulates. The posterior nares open behind the last upper molars. The brain was small, and somewhat convoluted. The skeleton most resembles that of Carnivores, especially the *Ursidæ*, but the scaphoid and lunar bones are not united, and there is a third trochanter on the femur. The radius and ulna, and the tibia and fibula are distinct. The feet are plantigrade, and each had five digits, all terminated with long, compressed and pointed, ungual phalanges, somewhat similar to those in the bears. The other genera of this order are less known, but all apparently had the same general characters. There are two distinct families, *Tillotheridæ*, in which the large incisors grew from persistent pulps, while the molars have roots; and the *Stylinodontidæ*, in which all the teeth are rootless. Some of the animals of this group were as large as a tapir. With *Hyrax* or the *Toxodontia* the present order appears to have no near affinities.

ANTHROPOLOGY.

CLAY-BALLS AS SLUNG SHOT OR COOKING STONES. — Round balls of clay as hard as that material could be made were seen in the museum of Nassau, N. P., labelled from a cave in the Islands. These might be used for two purposes, as they were round and the size of a hen's egg; first, their size and shape fitted them for a weapon of warfare, if wrapped in buckskin or hide drawn very tight over it and fastened, leaving a loose end, which, being firmly fastened over a strong stick, forms a formidable slung shot. The Apache Indians make and use the same kind of implement, which they use in battle, only their balls are of stone. The second use to which they might be applied is in cooking. After being heated very hot they were probably placed in the substance to be cooked, then taken out and this operation repeated until required no more. The ancient Indians of the Bahamas made pottery, as pieces found testify, therefore they could cook in vessels of pottery when stationary, but if travelling, it would be inconvenient to carry them, as they easily break; but they could make deep baskets, or trays of twigs, or leaves of the palm-trees so tight that they held water; thus, by putting water with whatever